LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

OTTAWA, CANADA

BULLETIN No. 353

TEMPERANCE BEER

11079 1

NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matters relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these columns. For convenience of reference these notes will be numbered in series.

A. McGILL,
Chief Analyst,

LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

BULLETIN No. 353

TEMPERANCE BEER

OTTAWA, November 13, 1916.

J. U. VINCENT, Esq.,
Deputy Minister of Inland Revenue.

SIR,—I beg to hand you a report upon 129 samples purchased by our inspectors in February, March and April last as Temperance Beer.

An Order in Council of February 8, 1911 and published as Circular G. 947 defines Malt Liquors and Malt Beverages as follows:

"1. Malt Liquor is a beverage made by the alcoholic fermentation of an infusion in potable water, of barley malt and hops.

2. Ale or beer is a beverage produced by top fermentation of an infusion, in potable water, of barley malt and hops; with or without other starchy and saccharine matters and contains in one hundred (100) cubic centimetres (20° C.) not less than two and seventy-five one-hundredths (2·75) grammes of alcohol (equivalent to six (6) per cent by volume of proof spirits), not less than three and one half (3·5) grammes of extract, and not less than eleven one-hundredths (0·11) gramme of ash, chiefly potassium phosphate.

3. Porter and Stout are varieties of ale or beer made in part from highly roasted malt, or barley, an[illegible] other respects, with the requirements for ale and beer.

4. Lager Bee[illegible] duced by bottom fermentation which contains, in one hundred (100) c[illegible] tres (20° C.), not less than three and one-half (3·5) grammes of extracti[illegible] and eleven one-hundredths (0·11) gramme of ash, chiefly potassium phosphate, and not less than two and fifty hundredths (2·50) grammes of alcohol, equivalent to five and five tenths (5·5) per cent by volume, of proof spirits.

5. Light Beer, is a Beer, containing in one hundred (100 cubic centimetres, at 20° C. less than two (2) grammes of alcohol (equivalent to less than four and four-tenths (4·4) per cent by volume of proof spirits)."

It will be observed that Beer (Ale), Lager Beer and Light Beer are defined. The last named may contain up to 4·4 per cent. of proof spirits.

The article known and extensively sold as Temperance Beer, or Non-alcoholic Beer, has appeared on our markets since the enactment of the above quoted standards, and is, undoubtedly intended to meet the requirements of the Anti-Liquor Laws recently passed by several of the Provincial Legislatures.

All the above named types of Beer defined by G. 947 are spirituous liquors, and as such are debarred from sale wherever the Anti-Liquor laws are in force. Brewers have quite naturally sought to meet the popular demand for an article resembling beer, and possessing some of the properties of beer, by placing on the market a malt product which should contain so little alcohol as to permit its sale as a non-alcoholic beverage.

In defining fruit juices and other non-alcoholic drinks, it was found necessary to recognize the fact that, as most of these beverages contain fermentable material (sugars), small quantities of alcohol must naturally be present, due to unintentional

fermentation in manufacture or in storage. The actual amount of such accidental alcohol might be very small; but practical conditions of bottling, transportation and storage make it possible for the alcohol—to increase in amount, after leaving the factory, and it was necessary to ascertain, by actual analysis, the facts of the case. It may be well to introduce here a brief summary of the data upon whose study a recommendation was made by your Advisory Board.

(Alcohol is stated in terms of proof spirit)

Bulletin No. 82, published in 1902, reported 15 samples sold as Unfermented Grape Juice:

2	samples	contained	no alcohol.
9	"	"	traces only.
4	"	"	amounts varying from 1·86 per cent. to 3·30 per cent.

Bulletin No. 94, published in 1904, reported 21 samples of Sweet Cider.

1	sample	contained	no alcohol.
15	"	"	less than 1·75 per cent.
5	"	"	more than 1·75 per cent. and up to 3·85 per cent.

Bulletin No. 166, published in 1908, reported 63 samples of so-called Unfermented Grape Juice.

51	samples	contained	no alcohol, or traces only.
1	"	"	less than 1 per cent.
2	"	"	less than 2 per cent.
1	"	"	less than 3 per cent.
5	"	"	less than 4 per cent.
2	"	"	less than 5 per cent.
1	"	"	above 5 per cent.

Bulletin No. 169, published in 1908, reported 15 samples of Sweet Cider.

10	samples	contained	no alcohol or traces only.
3	"	"	less than 1 per cent.
1	"	"	1·16 per cent.
1	"	"	2·48 per cent.

Bulletin No. 239, published in 1912, reports upon 36 samples of Sweet Cider, very few of which were entirely free from alcohol.

22	samples	gave	less than	1	per cent.
5	"	"	"	2	"
7	"	"	"	3	"
2	"	"	more than 3 per cent.		

Bulletin No. 280, published in 1914, reports 150 samples of so-called Soft Drinks. Most of these are free from more than traces of alcohol; but three samples of Ginger Beer contained over 3·50 per cent. proof spirits.

Bulletin No. 307, published in 1915, reports upon 111 samples of Unfermented Grape Juice. With few exceptions the alcohol does not exceed 3·50 per cent. (proof spirit), but scarcely any samples are entirely free from alcohol.

Experience gained since 1911 serves to strengthen my opinion that the limit fixed by Order in Council, in that year, is a reasonable one. Anything more exacting would work unnecessary hardship to manufacturers of Grape Juice, Sweet Cider, and so-called Soft Drinks.

It is of course, to be kept in mind that the number 3·5 per cent. proof spirit is a limit number, which will, under normal conditions of sale, be met with in soft drinks only at long intervals and in rare cases.

So-called "Temperance Beer" is, on the contrary, intended to be a non-alcoholic beverage only in the sense of containing not more alcohol than 3·5 per cent. while the manufacturer endeavours to work as close to this limit number as possible. It has even been urged that an occasional excess of spirit above 3·5 per cent. should not be

held to constitute adulteration, since the fact that, as a rule, this class of beer contains no more than 3·5 per cent. of spirit proves the brewer's intention not to exceed this limit. Occasional excess is therefore clearly accidental and should be so regarded.

If Temperance Beer is given legal recognition—at present it has none—the above contention may be regarded as reasonable.

The report now placed in your hands concerns 129 samples sold as Temperance Beer. Of this number, 114 samples contain not more than 3·5 per cent. of proof spirit; and if the terms of the Order in Council of 8th February 1911 may be construed as applying to the article in question, these samples must be regarded as non-alcoholic beverages, under the Federal Act.

Several of the Provincial Acts fix 2·5 per cent. of proof spirit as the limit for temperance beers. Eighty-four (84) of these samples meet provincial requirements.

Fifteen (15) samples contain more than 3·5 per cent. In detail as follows:

3·71 per cent.	1 sample.
4·12 "	2 "
4·26 "	1 "
4·40 "	1 "
4·52 "	2 "
4·64 "	1 "
4·76 "	1 "
4·89 "	2 "
5·01 "	2 "
5·37 "	1 "
5·98 "	1 "

Since Temperance Beer, under which name these articles were sold, is not recognized legally, it is questionable whether or not they can be judged as adulterated under the Act. Of course if we recognize this term as defining a non-alcoholic beverage, they contravene the Order in Council of 8th February 1911, and are adulterated.

In this connection it may be well to point out that the specific gravity of the alcoholic distillate has been interpreted by reference to the Hehner Tables. These Tables have, since 1884, when a special edition of them was published by this Department and distributed for the use of its officers, been accepted as official. I have not, however, been able to find any strictly legal sanction for their use in preference to other Alcohol Tables, variously authorized, with which they do not strictly conform.

I would respectfully advise the authoritative adoption of some one set of tables; and a set recently prepared under the direction of Sir Edward Thorpe, Principal of the Government Laboratories of Great Britain, would appear to be the best available. The Tables in question have been constructed with very great care, and are based upon the latest and most exact data in existence.

It is further to be observed that under ordinary conditions of working, there is a limit to accuracy practically obtainable. Very extended work in these laboratories leads me to conclude that the fourth decimal figure of the number expressing the specific gravity of a highly diluted alcohol may, even in careful hands, vary to the extent of one unit. This corresponds to an amount of proof spirit represented by approximately two-tenths (0·2) of one per cent. and I regard it as reasonable to allow a variation of this amount in interpretation. In other words, a beverage showing 3·70 per cent. of proof spirit, as the result of analysis, should not be held to exceed the legal limit of 3·50 per cent. by an amount which could justify legal penalty.

I beg to recommend publication of this report as Bulletin No. 353.

I have the honour to be, Sir,
Your obedient servant,

A. McGILL,
Chief Analyst.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.
DISTRICT OF NOVA SCOTIA—							
1916.							
Mar. 15	Temperance Beer.	64431	A. Cameau, Yarmouth...	3 bots	Nil.	Halifax Breweries, Halifax.	Mfrs.....
" 17	" ..	64432	C. L. Smith, Windsor....	3 "	24	Biglow & Hood, Truro.	" .....
April 7	" ..	64433	A. Keith & Sons, Halifax.	3 "	Nil.	Vendors.	.....
" 7	" ..	64434	Halifax Breweries, Halifax.	3 "	"	"	.....
" 7	" ..	64435	" " ..	3 "	"	"	.....
" 7	" ..	64436	" " ..	3 "	"	"	.....
" 7	" ..	64437	Oland & Son, Ltd., Halifax.	3 "	"	"	.....
" 7	" ..	64438	Ramsay's, Ltd., Halifax..	3 "	"	"	.....
" 7	" ..	64439	" " ..	3 "	"	"	.....
" 7	" ..	64440	Halifax Breweries, Halifax.	3 "	"	"	.....
" 10	" ..	64414	Whelan & Ferguson, Halifax.	3 "	"	"	.....
DISTRICT OF NEW BRUNSWICK—							
Mar. 3	Temperance Beer.	69311	Dolan Bros., St. John....	3 bots.	60	Vendors.....	.....
" 3	" ..	69312	" " ..	3 "	30	"	.....
" 3	" ..	69313	" " ..	3 "	30	"	.....
" 3	" ..	69314	M. E. Grass, St. John....	3 "	30	Sussex Beverage Co., Ltd., Sussex.	.....
" 4	" .	69315	J. J. Ferris, St. John	3 "	25	Vendor.....	.....
" 7	" ..	69316	Quigg Bros., Fairville ...	3 "	Nil.	Vendors.....	.....
" 14	" ..	69317	S. H. McKee & Son, Fredericton.	3 "	30	"	.....
" 15	" ..	69318	E. B. Fisher, Woodstock..	3 "	45	Enterprise Bottling Co., Fredericton.	.....
" 21	" ..	69319	Sussex Mineral Springs Co., Sussex.	3 "	30	Vendors.....	.....
" 22	" ..	69320	Havelock Mineral Springs Co., Moncton.	3 "	18	"	.....

TEMPERANCE BEER.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Specific Gravity of Beer.	Specific Gravity of Distillate.	Specific Gravity of Residue.	Alcohol. By Weight.	Alcohol. By Volume.	Alcohol. As Proof Spirits.	Solids p. c.	Preservatives. Salicylic Acid, Parts per 5,000.	Preservatives. Sulphurous Acid, parts per 10,000.		
R. J. WAUGH, INSPECTOR.											
				p. c.	p. c.	p. c.	p. c.				
Sold as Hop Beer.	.....	0·9957	1·0105	2·44	3·07	5·27	2·74	None.	None.	64431	Above 3·5 p.c. proof spirit.
Sold as Neura Cura.	.....	0·9999	1·0298	0·05	0·07	0·12	7·12	"	"	64432	
Sold as Cream Beer.	.....	0·9966	0·0066	1·94	2·43	4·26	1·73	"	"	64433	Above 3·5 p.c. proof spirits.
Sold as Light Hop.	.....	0·9984	1·0050	0·84	1·06	1·86	1·32	"	0·55	64434	
Sold as Dark Hop.	.....	0·9983	1·0096	0·89	1·13	1·97	2·50	"	0·94	64435	
Sold as Golden Malt.	.....	0·9961	0·0090	2·22	2·79	4·89	2·35	"	None.	64436	Above 3·5 p.c. proof spirit.
Sold as Malt Noir.	.....	0·9962	1·0130	2·17	2·72	4·76	3·39	"	"	64437	"
Sold as Hop Ale.	.....	0·9970	1·0080	1·69	2·12	3·71	2·09	"	"	64438	"
Sold as Malted Porter.	.....	0·9967	1·0127	1·87	2·35	4·12	3·32	"	"	64439	"
Sold as Malt-one.	.....	0·9964	1·0073	2·06	2·58	4·52	1·91	"	.	64440	"
Sold as Hop Tonic.	.....	0·9952	1·0188	2·72	3·42	5·98	4·97	"	"	64414	"
JOHN C. FERGUSON, INSPECTOR.											
Ginger Beer...	.....	0·9992	1·0434	0·42	0·53	0·93	11·48	None.	None.	69311	
Root Beer.....	.....	0·9976	1·0376	1·31	1·65	2·89	9·95	"	"	69312	
Hop Beer	.....	0·9973	1·0171	1·50	1·88	3·30	4·50	"	"	69313	
Ginger Beer...	.....	0·9993	1·0441	0·37	0·46	0·81	11·67	"	"	69314	
" ...	.....	0·9983	1·0243	0·89	1·12	1·97	6·41	"	"	69315	
Peptonized Porter.	.....	0·9989	1·0049	1·12	1·42	2·48	1·30	"	"	69316	
Ginger Beer...	.....	0·9998	1·0315	0·11	0·13	0·23	8·29	"	"	69317	
" ...	.....	0·9995	1·0340	0·26	0·33	0·58	8·96	"	"	69318	
" ...	.....	0·9988	1·0429	0·63	0·79	1·39	11·35	"	"	69319	
" ...	.....	0·9999	1·0401	0·05	0·07	0·12	10·59	"	"	69320	

Date of Collection.	Name of Sample.	No. of Sample.	Name and Address of Vendor.	Cost. Quantity.	Cost. Cents.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Manufacturer.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Furnisher.
DISTRICT OF QUEBEC CITY—							
1916.							
Feb. 16	Bière de Temperance.	56673	T. Ferland, 142 Côte d'Abraham, Quebec.	3 bots.	25	G. H. Fortier Cie...	....
" 16	" ..	56674	F. Rouleau, 139 D'Aiguillon, Quebec.	3 "	20	Rate & Frère.. ..	....
" 18	" ..	56675	H. Thivierge, 408 St. Valier, Quebec.	3 "	45	E. Fortier, Quebec..	.....
" 18	" ..	56676	E. Bigaouette, 1 Place St. Jacque Cartier, Quebec.	3 "	20	" " ..	....
" 21	" ..	56677	" " ..	3 "	20	" " ..	.....
" 21	" .	56678	N. O. Coté, 168 du Pont, Quebec.	3 "	35	" " ..	.....
" 21	" ..	56679	J. P. Morisette, 348 Du Roi, Quebec.	3 "	35	Fluet, Quebec.....	....
" 23	" ..	56680	A. Ferland, 125 de la Couronne, Quebec.	3 "	45	E. Fortier, Quebec..	.....
" 23	" ..	56681	N. Lafrance, 179 Dorchester, Quebec.	3 "	20	J. A. Fluet, Quebec.	.....
" 23	" ..	56682	A. Delisle, 181 Dorchester, Quebec.	3 "	20	Fortier, Quebec.. ...	....
DISTRICT OF QUEBEC PROVINCE—O. BROCHU, N. CADIEUX							
Mar. 23	Bière de Temperance.	4466	Jos. Theberge, St. Raphael.	3 bots.	40	Jos. Prevost, Montmagny.	.....
" 23	" ..	4467	Theodore Bernard, St. Raphael.	3 "	40	Gagnon & Dechive, St. Charles.	....
" 23	" ..	4469	Andre Bisson, St. Raphael.	3 "	40	E. Fortier & Cie....	.....
" 23	" ..	4475	Louis Corriveau, St. Michel.	3 "	40	Gagnon & Dechive, St. Charles Co., Bellechasse.	....
" 23	" ..	4476	" " ..	3 "	40	Ed. Coulombe, Quebec.	.....
" 25	" ..	4481	Joseph Dinelle, Armagh..	3 "	60	Jos. Prevost, Montmagny.	.....
Feb. 16	" ..	387	Zotique Allaire, St. Jerome.	3 "	40	Dawes Breweries, Lachine, Montreal.	.....
" 12	" .	72238	Jos. Provost, Montmagny.	3 "	45	Boswell Brewing, Ltd., Quebec.	....
" 15	" ..	72243	J. E. Belanger, Montmagny.	3 "	45	Silver Spring Brewery, Ltd., Sherbrooke.	....
" 17	" ..	72245	A. Prevost, St. François..	3 "	45	E. Fortier Cie, Quebec.	.....
" 18	" ..	72248	A. Letourneau, St. Pierre.	3 "	45	Silver Spring Brewery, Ltd., Sherbrooke.	.. . .

TEMPERANCE BEER.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Specific Gravity of Beer.	Specific Gravity of Distillate.	Specific Gravity of Residue.	Alcohol.			Solids p.c. $\frac{W}{V}$	Preservatives.			
				By Weight.	By Volume.	As Proof Spirits.		Salicylic Acid Parts per 5,000.	Sulphurous Acid Parts per 10,000.		
F. X. W. E. BELAND, INSPECTOR.											
				p. c.	p. c.	p. c.	p. c.				
.....	.....	0·9988	.....	0·63	0·79	1·39	.....	.....	.....	56673	
.....	.....	0·9975	.....	1·34	1·69	2·96	.....	.....	.....	56674	
.....	.....	0·9986	.....	0·74	0·93	1·62	.....	.....	.....	56675	
.....	.....	0·9989	.....	0·58	0·73	1·28	.....	.....	.....	56676	
.....	.....	0·9971	.....	1·62	2·04	3·58	.....	.....	.....	56677	
.....	.....	0·9986	.....	0·74	0·93	1·62	.....	.....	.....	56678	
.....	.....	0·9970	.....	1·65	2·08	3·64	.....	.....	.....	56679	
.....	.....	0·9985	.....	0·79	0·99	1·74	.....	.....	.....	56680	
.....	.....	0·9978	.....	1·19	1·49	2·61	.....	.....	.....	56681	
.....	.....	0·9988	.....	0·63	0·79	1·39	.....	.....	.....	56682	
A. PELLETIER AND H. RIOUX, TEMPORARY INSPECTORS.											
.....	.....	0·9977	1·0067	1·25	1·57	2·75	1·75	None.	0·86	4466	
.....	.....	0·9972	1·0056	1·56	1·96	3·44	1·47	"	None.	4467	
.....	.....	0·9976	1·0065	1·31	1·65	2·89	1·70	0·09	"	4469	
.....	.....	0·9981	1·0054	1·00	1·26	2·20	1·42	None.	"	4475	
.....	.....	0·9978	1·0025	1·19	1·40	2·61	0·66	0·08	"	4476	
.....	.....	0·9979	1·0071	1·12	1·42	2·48	1·85	None.	0·77	4481	
.....	.....	0·9988	.....	0·63	0·79	1·39	.....	.....	.....	357	
.....	.....	0·9985	1·0071	0·79	0·99	1·74	1·85	None.	0·30	72238	
.....	.....	0·9976	1·0069	1·31	1·65	2·89	1·80	"	0·74	72243	
.....	.....	0·9981	1·0060	1·00	1·26	2·20	2·09	"	0·57	72245	
.....	.....	0·9977	1·0067	1·25	1·57	2·75	1·75	"	0·74	72248	

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost. Quantity.	Cost. Cents.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Manufacturer.	Furnisher.
			DISTRICT OF QUEBEC PROVINCE—				
1916.							
Feb. 17	Bière Temperance.	4939	Hrmeni Cloutier, Notre Dame du Lac.	3 bots.	75	La Brasserie Champlain, Quebec.	.....
17	" ..	4941	Maltide Morin, Notre Dame du Lac.	3 "	60	" "	.....
17	" ..	4946	Eugene Pelletier, Cabano.	3 "	60	" "	.....
" 17	" ..	4947	Jos. Leveque, Cabano....	3 "	60	" "	.....
" 21	" ..	4949	J. A. Chamard, Fraserville.	3 "	60	Fox Head Brewery, Quebec.	Wilson Lawe, Fraserville.
" 21	" ..	4950	Adelard Thibeau, Fraserville.	3 "	45	" "	Boswell's, Quebec.
" 21	" ..	4951	Joseph Charite, Fraserville.	3 "	45	J. A. Thibeau, Fraserville.	.....
" 21	" ..	4952	François Dionne, Fraserville.	3 "	45	Gagnon & Dechine, St. Charles.	.....
" 21	" ..	4953	Joseph A. Pelletier, Fraserville.	3 "	45	Silver Spring Brewery, Sherbrooke.	Jos. Prevost, Montmagny.
" 21	" ..	4954	" "	3 "	46	" "	"
Mar. 7	Bière.....	72305	Elzear Bernier, St. Fabien	3 "	60	.....	.....
" 8	"	72309	Pascal Larrivee, Trois Pistoles.	3 "	30	Champlain.....	.....
" 8	"	72310	Dame V. L. Morency, Trois Pistoles.	3 "	60	"	.....
" 8	"	72311	J. A. Gendreau, St. Fabien.	3 "	60	Jos. Prevost, Montmagny.	.....
" 11	"	72314	Paul Laluzes, Rimouski..	3 "	60	Th. Ray.....	.....
" 11	"	72315	Larrivée & Boucher, Rimouski.	3 "	60	Silver Spring, Sherbrooke.	.....
" 13	"	72322	J. O. Aubut, Bic	3 "	60	E. Fortier & Cie., Quebec.	.....
" 13	"	72325	Jos. Langes, Bic.....	3 "	60	J. A. Fluet, Quebec.	.....
			DISTRICT OF THREE RIVERS—				
Feb.. 17	Bière de Temperance.	69252	A. Mireault, Joliette.....	3 bots.	60	Vendor.....	.....
			DISTRICT OF MONTREAL—				
Mar. 30	Temperance Beer.	67611	W. Higgins, 1043 Wellington st., Verdun.	3 bots.	39	Dawes Brewery.....	.....
" 30	" ..	67612	M. Boivin, 1106 Wellington st., Verdun.	3 "	36	Nat. Breweries, Ltd., Lachine.	.....
April 25	" ..	67613	National Breweries, Ltd., Montreal.	3 "	25	Vendors.....	.....
" 25	" ..	67614	" "	3 "	25	"	.....
" 25	" ..	67615	" "	3 "	20	"	.....
" 25	" ..	67616	" "	3 "	20	"	.....

TEMPERANCE BEER.

Inspector's Report. (Is not an xpression of opinion.)	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Specific Gravity of Beer.	Specific Gravity of Distillate.	Specific Gravity of Residue.	Alcohol. By Weight.	Alcohol. By Volume.	Alcohol. As Proof Spirits.	Solids p. c. $\frac{W}{V}$	Preservatives. Salicylic Acid Parts per 5,000.	Preservatives. Sulphurous Acid, Parts per 10,000.		
Concluded.											
				p. c.	p. c.	p. c.	p. c.				
.....	.....	0·9961	1·0074	2·22	2·79	4·89	1·93	0·12	None	4939	Above 3·5 proof spirit.
.....	.....	0·9960	1·0075	2·28	2·86	5·01	1·96	"	"	4941	"
.....	.....	0·9960	1·0076	2·28	2·86	5·01	1·98	"	"	4946	"
.....	.....	0·9976	1·0032	1·31	1·65	2·89	0·84	"	"	4947	
.....	.....	0·9985	1·0087	0·79	0·99	1·74	2·27	0·16	Trace	4949	
.....	.....	0·9987	1·0095	0·68	0·86	1·51	2·48	None	0·46	4950	
.....	.....	0·9987	1·0081	0·68	0·86	1·51	2·12	"	0·21	4951	
.....	.....	0·9973	1·0066	1·50	1·88	3·30	1·73	"	None	4952	
.....	.....	0·9976	1·0066	1·31	1·65	2·89	1·73	"	0·79	4953	
.....	.....	0·9982	1·0061	0·95	1·19	2·09	1·35	"	0·72	4954	
.....	.....	0·9986	.....	0·74	0·93	1·62	.....	.....	.....	72305	
.....	.....	0·9967	.....	1·87	2·35	4·12	.....	.....	.....	72309	Above 3·5 proof spirit.
.....	.....	0·9978	.....	1·19	1·49	2·61	.....	.....	.....	72310	
.....	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	72311	
.....	.....	0·9994	.....	0·32	0·40	0·70	.....	.....	.....	72314	
.....	.....	0·9976	.....	1·31	1·65	2·89	.....	.....	.....	72315	
.....	.....	0·9978	.....	1·19	1·49	2·61	.....	.....	.....	72322	
.....	.....	0·9974	.....	1·44	1·81	3·16	.....	.....	.....	72325	
DR. V. P. LAVALLEE, INSPECTOR.											
.....	.....	0·9985	.....	0·63	0·79	1·39	.....	.....	.....	69252	
D. J. KEARNEY, INSPECTOR.											
Dawes	.....	0·9993	.....	0·37	0·46	0·81	.....	.....	.....	67611	
The Chief	.....	0·9996	.....	0·21	0·26	0·46	.....	.....	.....	67612	
Light Ale	.....	0·9980	.....	1·06	1·34	2·34	.....	.....	.....	67613	
Mild Ale	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	67614	
Mild Beer	.....	0·9980	.....	1·06	1·34	2·34	.....	.....	.....	67615	
Mild Ale	.....	0·9981	.....	1·00	1·26	2·20	.....	.....	.....	67616	

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost. Quantity.	Cost. Cents.	Name and Address of Manufacturer or Furnisher, as given by the Vendor. Manufacturer.	Furnisher.
						DISTRICT OF VALLEYFIELD—	
1916.							
Mar. 9	Temperance Beer.	62990	J. M. Ouimet, Vanleek Hill.	3 bots.	60	Golden Lion Brewery, Ltd., Valleyfield.	.....
" 9	" ..	62991	J. St. Denis, Vanleek Hill	3 "	45	Brading Breweries, Ottawa.	.....
						DISTRICT OF OTTAWA—	
Feb. 10	Temperance Beer.	70661	Mrs. John Dunbar, Renfrew.	3 bots.	37	St. Lawrence Brewery, Ltd., Cornwall	.....
" 10	" ..	70662	" "	3 "	38	Sudbury Brew. and Malt. Co., Sudbury	.....
" 10	" ..	70664	J. G. Forgie, Renfrew....	3 "	45	Brading Breweries, Ltd., Ottawa.	.....
" 10	" ..	70665	Dominion House, (M. J. O'Brien) Renfrew.	3 "	45	Capital Brewing Co., Ottawa.	.....
" 16	" ..	70672	B. Toohy, Almonte	3 "	30	"	.....
" 18	" ..	70683	Sanitaris, Ltd., Ottawa...	3 "	30	Hamilton Brew. Assn., Ltd., Hamilton	.....
" 18	" ..	70684	The O'Keefe Brewing Co., Ottawa.	3 "	45	Vendors.....	.....
" 21	" ..	70685	" "	3 "	45	"	.....
Mar. 3	" ..	70693	St. Lawrence Brewing Co., Ltd., Cornwall.	3 "	Nil.	"	.....
						DISTRICT OF KINGSTON—J. A. RICKEY	
Mar. 8	Temperance Beer.	73005	Jas. McParland, Kingston.	3 bots.	35	O'Keefe Brew. Co., Toronto.	.....
" 8	" ..	73006	The Thompson Bottling Co., Kingston.	3 "	30	The Lion Brew., Ltd., Berlin.	.....
" 9	" ..	73010	W. A. Rodbourne, Belleville.	3 "	30	O'Keefe Brew. Co., Toronto.	.....
" 9	" ..	73015	Geo. Williams, Belleville.	3 "	30	Hamilton Brew. Assn., Hamilton.	.....
" 10	" ..	73019	Peterboro' Wine and Liquor Store, Peterboro'.	3 "	35	Lion Brew., Ltd., Cobalt.	.....

TEMPERANCE BEER.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Specific Gravity of Beer.	Specific Gravity of Distillate.	Specific Gravity of Residue.	Alcohol. By Weight.	Alcohol. By Volume.	Alcohol. As Proof Spirits.	Solids p. c. W/V	Preservatives. Salic. lic Acid Parts per 5,000.	Preservatives. Sulphurous Acid, parts per 10,000.		
J. J. COSTIGAN, ACTING INSPECTOR.											
				p.c.	p. c.	p c.	p. c.				
....	.....	0·9982	.....	0·95	1·19	2·09	...	.....	. ....	62990	
Red Wing....	....	0 9987	.....	0·68	0·86	1·51	.....	.....	.....	62991	
J. A. RICKEY, INSPECTOR.											
Maltone. Contains less than 2½% proof spirits.	.....	0·9991	.....	0·47	0·60	1·04	.....	.....	....	70661	
Silverine Lager.	.....	0·9990	.....	0·53	0·66	1·16	.....	.. ..	.....	70662	
Red Wing ...	.....	0·9988	.....	0·63	0·79	1·39	.....	.....	.....	70664	
Capital 2½% Lager.	.....	0·9982	.....	0·95	1·19	2·09	. ..	... .	.. ..	70665	
2½%	.....	0·9980	.....	1·08	1·34	2·34	.....	.....	.....	70672	
Crown Lager. Less than 1½% proof.	.....	0·9983	.....	0 91	1·13	1·97	.....	.....	.... .	70683	
Star Beer. Contains less than 2½ proof spirit.	.... ..	0·9991	.....	0·47	0·60	1·04	.....	.....	.....	70684	
Star, a non-intoxicant. Contains less than 1½% alcohol.	.....	0 9988	.....	0·63	0·79	1·39	.....	.....	.....	70685	
Maltose. Contains less than 2½% proof spirit.	.....	0 9995	.....	0·26	0·33	0·58	.....	....	...	70688	
AND J. H. BARON, ACTING INSPECTORS.											
Star. 1½% alcohol.	.....	0 9991	.....	0·47	0·60	1·04	.....	.....	.....	73005	
Cobalt. Guaranteed less than 2½% alcohol.	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	73006	
....	....	0·9994	.....	0·32	0·40	0·70	. ..	.....	.....	73010	
Crown Lager. Less than 2½% alcohol.	.....	0·9986	.....	0·74	0·93	1·62	.....	....	.....	73015	
....	.. ..	0·9984	....	0·84	1·06	1·86	.....	.....	.....	73019	

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost. Quantity.	Cost. Cents.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Manufacturer.	Furnisher.
			DISTRICT OF TORONTO—				
1916.							
Mar. 2	Lagerine.	72606	Arena Ice Cream Parlor, 94 Bond St., Toronto.	3 bots.	45	Kuntz Brewery, Ltd., Waterloo.	.....
" 2	Cobalt Beer...	72607	Berlin Lion Brewing Agency, 11 Church St., Toronto.	3 "	25	Berlin Lion Brew., Berlin.	.....
" 2	Crown Lager..	72608	Hamilton Brew. Assn. Agency, 82 Ontario St., Toronto.	3 "	25	Hamilton Brew. Assn., Hamilton.	.....
" 2	Edelweiss	72609	Rheinhardt Brew., Ltd., 22 Mark St., Toronto.	3 "	....	Vendors.....	.....
" 2	Star Beer....	72610	The Royal Café, 710 Queen St. W., Toronto.	3 "	45	O'Keefe Brew. Co., Toronto.	.....
" 2	Localo Temperance Beer.	72611	The Carling B. and M. Co. Agency, 49 Simcoe St., Toronto.	3 "	....	Vendors.....	.....
" 3	Star Beer....	72612	The O'Keefe Brewery Co., Ltd., 17 Gould St., Toronto.	3 "	....	"	.....
" 6	Lagerine	72673	The Kuntz Brewery, Ltd., Agency, 878 Queen St. W., Toronto.	3 "	..	"	.....
			DISTRICT OF HAMILTON—				
Mar. 15	Temperance Beer.	72691	The Kuntz Brewery, Ltd., Hamilton.	3 bots	25	Vendors.....	.....
" 15	" ..	72692	A. G. Bain & Co., 89 King St. E., Hamilton.	3 "	25	Hamilton Brew. Assn., Hamilton.	.....
" 15	" .	72693	The Carling B. and M. Co. Agency, 77 King St. W., Hamilton.	3 "	25	Vendors.....	.....
" 15	" ..	72694	Hamilton Brewing Assn., Hamilton.	3 "	30	"	.....
" 15	" ..	72695	Berlin Lion Brew. Agency, 299 Bay St. N., Hamilton.	3 "	25	"	.....
" 16	" ..	72696	F. Hobday, 243 James St. N., Hamilton.	3 "	45	Berlin Lion Brew., Ltd, Berlin.	.....
" 16	" ..	72698	Frank Faltore, 159 James St. N., Hamilton.	3 "	30	Kuntz Brew., Ltd., Waterloo.	.....

TEMPERANCE BEER.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Specific Gravity of Beer.	Specific Gravity of Distillate.	Specific Gravity of Residue.	Alcohol.			Solids p.c.	Preservatives			
				By Weight.	By Volume.	As Proof Spirits.		Salicylic Acid Parts per 5,000.	Sulphurous Acid Parts per 10,000.		

H. J. DAGER, INSPECTOR.

				p. c.	p. c.	p. c.	p.c.				
.....	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	72606	
Less than 2½% P. S.	.....	0·9979	.....	1·12	1·42	2·48	.....	.....	.....	72607	
" ..	.....	0·9982	.....	0·95	1·19	2·09	.....	.....	.....	72608	
" ..	.....	0·9987	.....	0·68	0·86	1·51	.....	.....	.....	72609	
" ..	.....	0·9988	.....	0·63	0·79	1·39	.....	.....	.....	72610	
" ..	.....	0·9976	.....	1·31	1·65	2·89	.....	.....	.....	72611	
" ..	.....	0·9995	.....	0·26	0·33	0·58	.....	.....	.....	72672	
" ..	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	72673	

H. J. DAGER, ACTING INSPECTOR.

Lagerine. Less than 2½% P. S.	.....	0·9990	.....	0·53	0·66	1·16	.....	.....	.....	72691	
Crown Lager. Less than 2½% P. S.	.....	0·9985	.....	0·79	0·99	1·74	.....	.....	.....	72692	
Localo. Less than 2½% P. S.	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	72693	
Crown Lager. Less than 2½% P. S.	.....	0·9982	.....	0·95	1·19	2·09	.....	.....	.....	72694	
Cobalt Beer. Less than 2% P. S.	.....	0·9984	.....	0·84	1·06	1·86	.....	.....	.....	72695	
Cobalt Beer Less than 2½% P. S	.....	0·9985	.....	0·79	0·99	1·74	.....	.....	.....	72696	
Lagerine. Less than 2½% P. S.	.....	0·9986	.....	0·74	0·93	1·62	.....	.....	.....	72698	

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost. Quantity.	Cost. Cents.	Name and Address of Manufacturer or Furnisher as given by the Vendor. Manufacturer.	Furnisher.
							DISTRICT OF WINSDOR—
1916.							
Mar. 14	Temperance Beer.	64919	Tom Monsom, Leamington.	3 bots.	30	B. A. Brewing Co., Co., Windsor.	.....
" 14	" ..	64920	P. Colbet, Leamington...	3 "	25	Kuntz Brew. Co., Waterloo.	.....
" 14	" ..	64921	Alfred J. Hall, Kingsville	3 "	25	O'Keefe, Toronto...	.....
" 14	" ..	64922	" "	3 "	25	Kuntz Brew. Co., Waterloo.	.....
" 15	" ..	64923	A. Thompson, Windsor..	3 "	25	Reinhardt, Hamilton	.....
" 16	" ..	64924	Scaudett Bros., London..	3 "	40	Carling B. Co., London.	.....
							DISTRICT OF MANITOBA—
Feb. 22	Temperance Beer.	72046	Jeffries Bros., Portage la Prairie.	3 bots.	30	John McLeod, Portage la Prairie.	.....
" 23	" ..	72047	The Can. Temperance Brew. Co., 1370 Main st., Winnipeg.	3 "	30	Vendors..... ..	.....
" 23	" ..	72048	C. G. Johnson, 529 Main st., Winnipeg.	3 "	30	McDonald & Shea, Winnipeg.	.....
" 27	" ..	72049	Frank Restivo, 343 McDermott, ave., Winnipeg.	3 "	30	Blackwoods, Ltd., Winnipeg.	.....
" 28	" ..	72050	N. Roseblatt, 655 Main st., Winnipeg.	3 "	75	Beaver Brew. Co., Winnipeg.	.....
" 29	Hop Beer....	72055	Joseph Helie, 21 Provencher ave., Winnipeg.	3 "	30	Drewry's. Ltd., Winnipeg.	.....
" 28	"	72056	Jane Lascona, Taché ave., St. Boniface.	3 "	40	Beaver Brew. Co., Winnipeg.	.....
Mar. 7	"	72069	Beaver Brew. Co., 721 Furby st., Winnipeg.	3 "	30	"	.....
" 7	"	72071	Thos. Holland, 205 Brooklyn, st., Winnipeg.	3 "	40	"	.....
" 8	"	72072	Golden Rule Temperance Co., 579 Main st., Winnipeg.	3 "	30	McDonald & Shea, Winnipeg.	.....
							DISTRICT OF SASKATCHEWAN—
March 7	Temperance Beer.	71555	Flanagan Hotel, Saskatoon.	3 pts.	60	Horsehen Wentzler Brew. Co., Saskaton.	.....
" 7	"	71556	Windsor Hot Saskaton.	3 "	40	L. Drewry, Winnipeg.	.....
" 8	"	71560	Windsor Hotel, Prince Albert.	3 "	40	Golden Lion Brew. Co., Prince Albert.	.....
" 10	"	71564	Alexander Hotel Bar, Regina.	3 "	60	Calgary Brew and Malt Co., Calgary.	.....
" 10	"	71565	Savoy Cafe, Regina....	3 "	40	Regina Brew. Co., Regina.	.....
" 10	"	71567	C. E. R. Restaurant, Moosejaw.	3 "	45	Moosejaw B. and M. Co., Moosejaw	.....

TEMPERANCE BEER.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis. Specific Gravity of Beer.	Specific gravity of Distillate.	Specific gravity of Residue.	Alcohol. By Weight.	By Volume.	As Proof Spirits.	Solids p. c. w/v	Preservatives. Salicylic Acid Parts per 5,000.	Sulphurous Acid, parts per 10,000.	No. of Samples.	Remarks and Opinion of the Chief Analyst.
JOHN TALBOT, INSPECTOR.											
				p. c.	p. c.	p. c.	p. c.				
Proxy	.....	0·9989	.....	0·58	0·73	1·28	.....	.....	.....	64919	
Lagerine	.....	0·9985	.....	0·79	0·99	1·74	.....	.....	.....	64920	
Star	.....	0·9993	.....	0·37	0·46	0·81	.....	.....	.....	64921	
Lagerine	.....	0·9986	.....	0·74	0·93	1·62	.....	.....	.....	64922	
Edelweiss	.....	0·9989	.....	0·58	0·73	1·28	.....	.....	.....	64923	
Carling's	.....	0·9978	.....	1·19	1·49	2·61	.....	.....	.....	64924	
J. B. COSGROVE, INSPECTOR.											
.....	1·0053	0·9982	1·0089	0·95	1·19	2·09	2·32	None.	None.	72046	
.....	1·0003	0·9977	1·0025	1·25	1·57	2·75	0·66	"	"	72047	
.....	1·0196	0·9972	1·0222	1·56	1·96	3·44	5·88	"	"	72048	
.....	1·0103	0·9982	1·0132	0·95	1·19	2·09	3·39	"	"	72049	
.....	1·0210	0·9986	1·0222	0·74	0·93	1·62	5·88	"	Trace.	72050	
.....	1·0093	0·9988	1·0105	0·63	0·79	1·39	2·74	"	"	72055	
.....	1·0237	0·9987	1·0240	0·68	0·86	1·51	6·34	"	"	72056	
.....	1·0218	0·9986	1·0233	0·74	0·93	1·62	6·16	"	"	72069	
.....	1·0153	0·9982	1·0171	0·95	1·19	2·09	4·50	"	"	72071	
.....	1·0181	0·9977	1·0204	1·25	1·57	2·75	5·41	"	"	72072	
L. H. HALL, TEMPORARY INSPECTOR.											
Malta Brand.	1·0155	0·9986	1·0176	0·74	0·93	1·62	4·63	None.	None.	71555	
Stout	1·0217	0·9993	1·0230	0·37	0·46	0·81	6·08	"	Trace	71556	
Hop Beer	1·0025	0·9977	1·0040	1·25	1·57	2·75	1·05	"	"	71560	
Chinook Brand	1·0193	0·9991	1·0199	0·47	0·60	1·04	5·27	Present.	"	71564	
Regina Beer, Royal Brand	1·0123	0·9984	1·0137	0·84	1·06	1·86	3·66	None.	"	71565	
Lagerine	1·0119	0·9984	1·0133	0·84	1·06	1·86	3·59	"	"	71567	

TEMPERANCE BEER.

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.									No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Specific Gravity of Beer.	Specific Gravity of Distillate.	Specific Gravity of Residue.	Alcohol.			Solids p. c. $\frac{W}{V}$	Preservatives			
				By Weight.	By Volume.	As Proof Spirit.		Salicylic Acid Parts per 5,000.	Sulphurous Acid, parts per 10,000.		
A. W. R. MARKLEY, INSPECTOR.											
				p. c.	p. c.	p. c.	p. c.				
RedStarBrand Less than 2½% Alcohol.	1·0194	0·9967	1·0206	0·6	0·86	1·51	5·46	None.	None.	52422	
Chinook Beer Proof Spirits 0·81.	1·0210	0·9988	1·0214	0·63	0·79	1·39	5·67	"	"	52423	
Hylo Brand, Lager Beer. Less than 2% Alcohol.	1·0070	0·9965	1·0103	2·09	2·51	4·40	2·69	"	"	52424	Above 3·5 p.c. proof spirit.
E. J. MORGAN, INSPECTOR.											
Near Beer. ..	1·0164	0·9975	1·0188	1·37	1·73	3·01	4·83	None.	Trace.	55555	
Non-tox	1·0072	0·9953	1·0118	1·56	1·96	3·44	2·92	"	"	55556	
Phœnix Phizz.	1·0161	0·9976	1·0185	1·37	1·73	3·03	4·69	"	"	55557	
Non-Intox....	1·0074	0·9961	1·0111	2·06	2·58	4·52	2·75	"	"	55558	Above 3·5 p.c. proof spirit.
D. O'SULLIVAN, INSPECTOR.											
Cumtux Brand	1·0061	0·9963	1·0093	2·11	2·62	4·64	2·35	None.	Trace.	71337	Above 3·5 p.c. proof spirits.
Phœnix Phizz Brand.	1·0128	0·9971	1·0152	1·62	2·01	3·58	3·93	"	"	71338	